

ABSTRACT

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Cleaning of dirty rectangular sheets of fabric must proceed through such steps as laundering, dewatering, drying, spreading, and ironing. At present, the spreading step remains yet to be automated and, therefore, must be manually carried out. Several methods and apparatuses are disclosed which enable a rectangular sheet of fabric to be spread by gripping the rectangular sheet of fabric at one corner thereof and another corner diagonals to the one corner and suspending the rectangular sheet of fabric in the shape of an inverted triangle and, after the edge of the rectangular sheet of fabric is deprived of a twist and is consequently straightened, gripping the rectangular sheet of fabric at an arbitrary corner and a point terminating an arbitrary width of an edge extended from the arbitrary corner and spreading the rectangular sheet of fabric using the grips. The methods and apparatuses enable the spreading step to be automated. Thus the whole process for cleaning dirty rectangular sheets of fabric is automated by this invention.

ABSTRACT

A method for estimating the input power to a cable modem includes generating a look-up table containing AGC integrator accumulator values corresponding to selected frequencies and amplitudes. The look-up table is generated by first constructing a calibration matrix by inputting a plurality of calibration signals having known input frequencies and known input power levels into the cable modem's receiver, and recording AGC integrator accumulator values corresponding to several frequencies and power levels over a selected operating range as calibration points. Next, an interpolation and extrapolation process generates the look-up values corresponding to the frequencies and amplitudes in between the calibration points. During modem operation, the modem estimates the input power by checking the AGC integrator accumulator value corresponding to the input frequency and amplitude. Because the look-up table values are based on the cable modem's actual operating characteristics, the estimated input power will reflect any variations or irregularities in the modem's operation, such as gain non-linearities, frequency ripple, or temperature effects.

R0093497